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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,988	02/16/2006	Karl-Ludwig Grell	188.609	9459
47888 7590 10/07/2008 HEDMAN & COSTIGAN P.C. 1185 AVENUE OF THE AMERICAS NEW YORK, NY 10036				
EXAMINER HANNON, THOMAS R				
ART UNIT		PAPER NUMBER		
3656				
MAIL DATE		DELIVERY MODE		
10/07/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/565,988

**Applicant(s)**

GRELL ET AL.

**Examiner**

Thomas R. Hannon

**Art Unit**

3656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2008 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

The drawings were received on August 1, 2008. These drawings are not approved. Applicant has amended the drawings to change Figure 1a to be labeled as 1a and 1b, and has changed Figure 1b to now be labeled as Figures 1c and 1d. There is no corresponding change in the specification in either the Brief Description of the Drawings section, nor the Detailed Description, to properly reference these renumbered drawings. Moreover, newly labeled Figures 1a and 1c should be labeled as --Prior Art--.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grell et al. US 6,682,227.

Grell discloses a thin-walled needle bearing, produced without removal of material, the outer ring produced from a cold-rolled strip, characterized in that the outer ring is produced from a cold-formable, fully hardenable steel, and the fully hardened wall having a core hardness of  $\geq 600$  HV and a surface hardness of  $\geq 680$  HV. With respect to the limitation of a ratio of from 1:20 to 1:5 being set between their wall thickness and the diameter of the bearing needles, as this ratio is dependent on the relative size of the rolling elements, this is seen to be a matter of routine design optimization to one of ordinary skill in the art, and/or inherent in the structure of the thin-walled bearing of Grell. With respect to the specific ranges of the hardnesses, Grell discloses core and surface hardnesses within the ranges claimed. With respect to claims 4-6, while Grell

does not disclose a universal joint bush, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the bearing taught by Grell in known devices requiring the closed end structure of the bearing of Grell, including that of a universal joint.

Applicant's arguments filed August 1, 2008 have been fully considered but they are not persuasive. Applicant's remarks concerning the 112 rejection with respect to the term "thin-walled" are noted. Applicant states "the term 'thin-walled' which is equivalent to drawn cup needle bearing as can be seen from the assignee's partial catalog filed herewith" would be understood by one of ordinary skill in the art. Regarding Grell, Applicant states "the rolling bearing of the invention differs from the state of the art shown by the assignee's catalog by the claimed ratio between the wall thickness and the diameter of the needle bearing of 1:20 to 1:5 which is not taught by Grell et al. The Examiner's attention is directed to the comparison of the prior art illustrated by Grell et al and the assignee's catalog and the claimed bearing as in the application as filed." Applicant has taken two contrary positions with respect to the thin walled rings of the partial catalogs provided: 1) one of ordinary skill would understand the term "thin-walled" as claimed as supported by the catalog, and 2) the catalogs do not show the thin-walled bearing as claimed. Applicant's first argument will be adopted. Namely that the partial catalog pages provided in the response do indeed support the argument that the term "thin-walled" is known in the art, but also that the catalogs provide support for the argument presented in the rejection that ratio of the wall thickness is dependent on the relative size of the rolling elements, and is seen to be a matter of routine design optimization to one of ordinary skill in the art, and/or inherent in the structure of the thin-walled bearing of Grell.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas R. Hannon whose telephone number is (571) 272-7104. The examiner can normally be reached on Monday-Thursday (8:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard WL Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas R. Hannon/  
Primary Examiner, Art Unit 3656